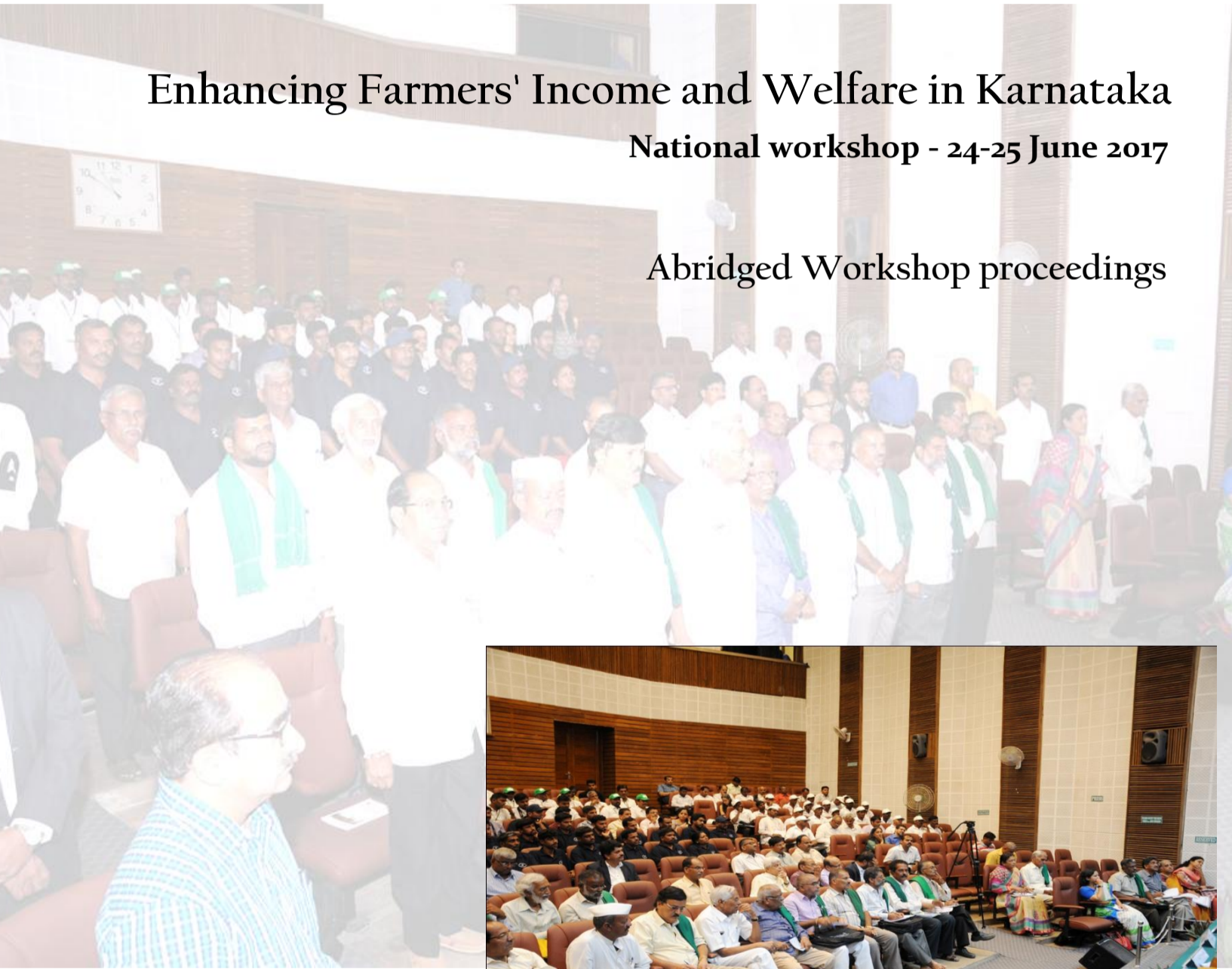




Enhancing Farmers' Income and Welfare in Karnataka

National workshop - 24-25 June 2017

Abridged Workshop proceedings





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National Workshop - 24-25 June 2017 Enhancing Farmers' Income and Welfare in Karnataka

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About the Workshop

Government of India has proposed doubling of income and welfare of the farming community, the largest social sector of the country after seven decades of independence. The Finance Minister of GOI, **Mr. Arun Jaitley** has raised this issue of increasing farmers income in the next five years in his budget speech of 2016 – 17 and this has been endorsed by the honorable Prime Minister **Mr. Narendra Modi**, on several occasions. As a supplement to this, the agriculture ministry of GOI is re named as “Ministry of Agriculture, Co- operation and Farmers Welfare”.

The state minister of GOI **Mr. Purushotham Rufal**, has officially intimated in Rajyasabha about doubling the farmers income by efficient use of agricultural inputs, removal of production uncertainties by increasing acre wise productivity, giving remunerative price by decreasing the production cost etc., In order to supplement this, the honorable Prime Minister of India, is reiterating his popular schemes like increasing the fertility of soil by distributing soil health cards to all the farmers, promoting “Paramparagatha Krishi Vikas Yojana” to encourage organic farming, promoting “Krishi Sinchayi Yojana” for economic and efficient usage of water, providing safety measures to farmers who suffer from natural disasters through his far sighted “Pradhana Mantri Fasal Vima Yojana”.

The online trading in Karnataka to make the agricultural marketing system competitive one and also to get fair price to farmers produce has been appreciated by Government of India and it has come forward to bring “Single Window e-Marketing system” on this line throughout the country. Similarly, it is said that the efficient implementation of ‘Minimum Support Price’ scheme (MSP), which is in vogue from several years will avoid “Distress Sale” by farmers. The Government of India is hopeful of increasing the farmers’ income by the ongoing schemes which are being implemented in mission mode like food security, horticulture development, sustainable agriculture, increase in edible oil production, agriculture extension etc. In order to co-ordinate all these schemes to enhance farmers’ income and welfare, the GOI has constituted a committee under the leadership of Additional Secretary to the Ministry of Agriculture and Farmers Welfare, **Dr. Ashok Dalwai**.

Getting inspired by this ambitious proposal of Government of India, Karnataka Agriculture Price Commission (KAPC), an advisory body of Government of Karnataka, has evolved a pilot project for “Enhancing Farmers’ Income and Welfare” in select districts of Karnataka . This project is being implemented in different agro climatic zones of the state through Krishi Vignana Kendras (KVK) of those particular districts. The state Agricultural and Horticultural Universities, Animal Husbandry and Fisheries University have also been involved in this project and they are giving all the assistance needed for the same.

The main objective of this pilot project is to transfer the available technology, convergence of all developmental programmes and also adoption of integrated farming system in the fields of the farming community. The technology is provided through training in KVKs, field level training and also exposure visits. This also includes attitudinal change of farmers, skill development and also behavioral change.

Integrated farming systems ensure the farming community year long source of income through multiple sources. The state agricultural universities have evolved several IFS models suited for different regions of the state. This has been utilised for this pilot project. Along with this, soil health and health of farm families’ are also taken care of.

Convergence of all developmental programmes of different departments of the Government for this pilot project is another target. This will help the farming community to get all the requirements needed for better agriculture and increasing their welfare. In order to achieve this, KAPC has constituted a committee of all district officers of development departments under the leadership of Deputy Commissioners of the concerned districts.

The KAPC in co-ordination with Institute for Social and Economic Change (ISEC), Bengaluru is conducting a base line survey in all the selected villages of this pilot project. Similarly, National Bureau of Soil Survey and Land Use Planning (NBSS & LUP) has prepared soil fertility maps for all these villages. The project makes use of this survey and achieves the required goal. After the implementation of this project, it is proposed to develop a blue print for enhancing farmers’ income and welfare in all the districts of the state. **This will be placed before the Government for formulating a suitable working policy.** This national workshop is a step towards fulfillment of this objective.

National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Workshop proceedings

◆ Inaugural Session

The two day national workshop on Enhancing Farmers' Income and Welfare in Karnataka was organised by Institute for Social and Economic Change, and Karnataka Agriculture Price Commission, Government of Karnataka, at the auditorium, Institute for Social and Economic Change Bengaluru-560072 on 24 and 25th June 2017.

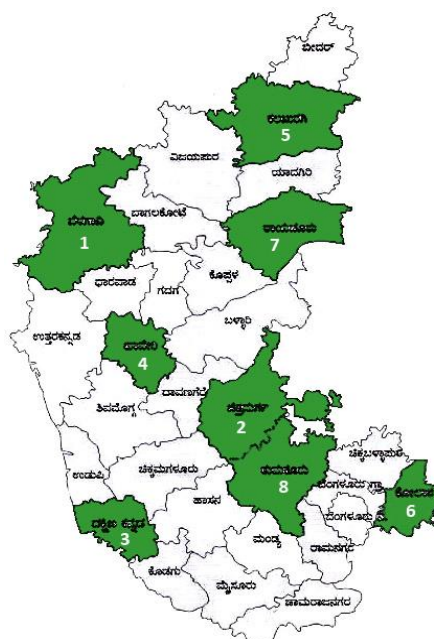


The welcome address was followed by lighting of the lamp marking the commencement of the inaugural session and Dr. T N Prakash was requested to give opening remarks for the two days workshop.

Dr.T.N.Prakash Kammaradi on his behalf extending a hearty welcome to Dr. Ashok Dalawai commenced his presentation with a reference to the point made earlier on how as per NSSO survey about 40% of the farmers if given an opportunity want to quit farming. Taking a serious note on this it was mentioned that in such eventuality what would be its implication on our food and nutritional security. In a grave situation like this there is need to act and find solutions. It is in this context he stated that the KAPC and GOK after much contemplation wanted to initiate a novel programme focusing not only on farmers' income but in the larger goal of welfare. The project focus is on eight districts representing the different agro climatic zones and in each district one village is selected where 25 farmer representatives have been identified whom he termed are the focal points of the proposed project.

◆ Selected districts and villages

Sl. No.	District	KVK	Village
1.	Kolar	Kolar	Bayyappanahalli
2.	Tumkur	Tiptur, Konehalli	Hulukatte Koppa
3.	Chitradurga	Hiriyur	Siddlaihakote
4.	South Kanara	Mangalore	Dharegudde
5.	Raichur	Raichur	Jakkaladinni
6.	Kalburgi	Kalburgi	Tellur
7.	Haveri	Hanumanamatti	Khurdu Veerapura
8.	Belgaum	EEU, Arabavi	Madhuvala



Addressing the 200 farmers assembled in the auditorium with each group turning out in uniform attire representing their region Dr. T. N. Prakash said that it is an inspiration to see their interest and enthusiasm which matters most to the success of the project.

◆ **Keynote address - Dr. Ashok Dalwai, IAS, Additional Secretary, Ministry of Agriculture and Farmers Welfare**

Dr. Ashok Dalwai, started his presentation by recalling his association with ISEC as a student and expressed happiness being here again on a very important occasion, recognizing that both ISEC and KAPC as two important institutions known for their commitment to the cause of farmers. He went on to say that KAPC's project intending to develop a demonstration model in IFS is laudable.

Delving on the discussions that are there all over, be it Agricultural Universities or Development Departments or technologies, he stated that what matters is the outreach. The experience has shown that hardly 50-60% of technologies reach the farmers and the unreached gap is a matter of grave concern. It is time we remember that the very purpose of technologies is the farmer and it is not happening was the point. Terming it as the last mile reach he stated that the problem needs to be identified and solution should be found.



The extension system in the country has become very weak was his considered opinion. The T & V system under the World Bank programme that ended in 90s had its merits. There was a well identified system where in scientists and extension workers through their regular visits were training farmers and transferring the technologies on an ongoing basis. All over the country today there are large vacancies (>50%) and unfilled posts in extension system. As against about two lakhs posts there are only about a lakh of them and the field work suffers. The situation being no different in developed states of Punjab, Haryana and Gujarat should concern all of us, he stated.

In the ATMA programme launched during 2005-06 in the last six years there is decline in staff count and something needs to be done. It is a moot question as to how we can talk about doubling the farmers' incomes unless the extension system is strengthened.

We have to provide space for NGOs and Private agencies to supplement the extension system. Time has come that we take a relook at the earlier manpower based system to the choice we now have in ICT valued platforms with a potential for efficient and larger outreach. He made an appeal that the workshop has to deliberate on this crucial issue. The need to reach information in real time is the need of the hour.

Stating that the Agrarian crisis is not a new phenomenon, all efforts should be on finding solutions than only discussions and arguments was the point of understanding the realities and accepting the problems is the first step in finding solutions, he stated.



Comparing the agriculture lands in USA and India, Dr. Dalwai pointed out that despite being 2.5 times in size the agriculture lands in US is less than that of India. We are blessed with 141m ha of agricultural lands; even China which is a big country has only about 110m ha was a notable point. In spite of having such a large resource there being problems is on account of some structural weaknesses and we need to understand it.



We are often more emotional than being rational or scientific. We need to look at agriculture also as an enterprise where there is no need for charity. Agriculture in our country in fact is the largest private enterprise and there are 14 crore farm families. Once we recognize this, its economics, profitability are all to be considered. There is no point in treating it as an inevitable avocation. We need to put in science and management if it has to work.

Quoting the basis of economics Dr.Dalwai stated that the assets are to be used for the production and produce has to be transported to market. After deducting the expenditure we have look at the net income. The equation, gross return minus cost of cultivation or production cost is the profit and how to multiply the same should be our concern.

Moving on to the issue of farmer's income he said three aspects should receive our attention; how to increase income, how to reduce costs and how to get higher price. The answers to these questions depend on what is the type of environment or situation in which we are placed be it social or economic environment.

Giving a comparison of farming in USA vs. India it was stated, there are 10 lakh farmers in US with an average land holding size of 200 hectare or 500 acre as compared to our situation where there are 14 crore farmers with very small holding size. The size of land holding is shrinking; it was 1.15 ha in the year 2011 and now it is dismal 0.65 hectare and there is need to understand the challenges of farming on such "kerchief sized plots". This small size with problem of further fragmentation is one of the fundamental structural weaknesses in Indian agriculture. He made categorical statement that the arguments on technologies being scale neutral is no more a tenable argument.

Moving on to marketing Dr. Dalwai made a point that APMCS started in 1960 are dogged with a plethora of problems and their operational style is almost monopolistic. Where there is no competition the farmers are definitely left in the lurch, he stated. This is the second structural weakness that daunts our agriculture system, where we need to exert much to bring improvements.

In the arena of farm credit, the extent of loan coverage from institutional sources is about 45% and a large number outside its purview is again a matter of serious concern. There is a huge outcry from farmers on loan related issues. Instead of educating the farmers properly we often resort to temporary measures like loan waiver and such measures do not last long was a point he said, needs our understanding. The farmers who are outside the purview of institutional credit system are not benefited by the loan waivers is to be kept in mind.

Referring to the call given by PM that we need to shift our focus from production to income, he stated that there is now a greater responsibility. There is no monitoring of farm house holds as of now. It is not uncommon for all members of a family working on their small holding without bothering on returns to their work and this need to change to provide proper compensation.

From the year 2005-06 it is known that many farmers are leaving agriculture and are moving on to take up non- agriculture work. This he said could be seen in migrant construction workers in many towns and cities. Making a point that there is a problem of huge population dependent on agriculture, farmers and landless agriculture laborers, The number of farmers might have now come down to around 11 crores from 14 crores and around 11-12 crores of laborers which totally adds up to > 20 crores which he said, is definitely a very large number. In 1950 this number was about 7 crores. He opined that to reduce this number we have to absorb more people in industry and services by creating more jobs. It is here Dr.Dalwai mentioned about the twin problem of under employment as well as disguised unemployment seen in our agriculture as the third structural weakness.

Explaining that there is need to wake-up to one more stark reality that stares at us, he mentioned the global phenomena of ‘climate change’. There was a time when it was ridiculed as imaginary constructs of scientists but no more. He went on to say that the climate change is real and in fact could be considered as one more weakness may be not only for us but for everyone. Saying that we have weather records for at least 100 years since 1888 and it is evident that in the last 15-17 years the number of highest temperature years is continuously on increase. This means the climate has been changing and it has been changing faster now.

Climate change is bound to affect our agriculture it affects crops, production and productivity threatening our very food security. It would definitely impact on the lives of farmers and farm households. He cited the example of our large wheat growing belts of indo-gangetic plains where the winter temperatures which used to be 10° – 12°C now crossing 20°C affecting our wheat production. Every one degree temperature raise will mean 5 – 10% decrease in yields, he stated.

Going further on the point of climate change he mentioned that the arrival, spread and intensity of rainfall has been changing across the Indian subcontinent: we need to remember that over decades we have developed and adopted all our technologies and package of practices to suit our rainfall systems and now everything would be thrown out of gear and we have to reset or realign all our technologies in tune with climatic changes.

Expressing his deep anguish on there being no reason why productive asset like land should remain poor he was emphatic that if we try hard enough there is and there has to be a way out. As India moves towards its diamond jubilee year of independence in 2022 we need to take more confidence. It is with this dream that our PM has desired that at least by then there has to be no room for poverty among farmers and hence programme of doubling their incomes.

Stating that in the country as a whole nearly 22% of farmers are in BPL category and everything possible has to be done to obviate this. The situation in states like Punjab and Haryana is better but in eastern states like Orissa, Jharkhand and Chattisgarh the scenario is much worse. He was confident that in the next six years we should work on a mission mode through policies and programmes and we need radical changes to reach our destination.

Concluding on a very optimistic note Dr.Dalwai cited that despite problems Orissa has shown the way. In the last 10 years starting from the year 2003 the farmers’ income there has doubled and this should encourage other states and the spirit if emulated should help all of us to do well to realize our dream.

◆ **Remarks by Sri.Hanumana Gowda Belgurki, Former member, APCO and member KAPC**

Making his remarks immediately after the key note address by Dr.Ashok Dalawai, Sri.Hanumana Gowda, mentioned that it is an auspicious day and the entire gathering here; the farmers, scientists and planners have put their heads together contemplating on the problems of farming. There have been speeches and presentations by many including no less a person than Secretary Agriculture Union Government but the question he posed to the audience is are farmers happy? And do they feel that they are respected for what they are doing?



In his concluding remarks he expressed his dismay that when IFS model is being propelled with all the enthusiasm it is understandable how the Agriculture Universities are being continuously disintegrating by mushrooming of large number of colleges all around.

◆ **Remarks by Dr.M.G.Chandrakanth, Director, ISEC**

In his remarks Dr.Chandrakanth, wanted to touch upon one important point made by Dr.Dalawai. Endorsing his views that the extension system in the country needs to be rejuvenated, he made a reference to the green revolution that changed the face of Indian agriculture. Giving due credit he said that there was a large contingent of village level workers called gramsevaks who contributed for the great change witnessed in agriculture. He appealed to Dept. of Agriculture to bring back the glory by strengthening the extension system and placing sufficient man power for field operations. Quoting a famous economist he said, that 58% of factor productivity could be attributed to agriculture extension and concluded that on no count we can afford to relegate it. The inaugural programme concluded by **Smt.Kamala, DDA, DOA, GOK** with vote of thanks.



◆ **Remarks by Sri.Vijay Javidae, Farmer leader**

Sharing his experiences with fellow farmers Sri.Vijay Javidae narrated his 40 years of experience in farming. Quoting Vinobha Bhave he mentioned that way back in pre-Independence India there was a discussion on minimum wages. Moving on from then, it is ironical that we are today still discussing the minimum compensation to be ensured to farmers for the crops they grow. There are years of drought when farmers face severe problems and even when the situation is better and harvests are good the farmers agitations don't subside, which only means that the farm sector continues to be in peril. The fight today is not about technology, size of the farm or even marketing, but it is about restoring dignity to farming as a profession. He brought to fore the widening gap between urban and rural sectors. When there is continuous wage revision for working class in the organized sector it is sad that the farmers are left in the lurch and have to fend for themselves. Ridiculing the programme of doubling the farm incomes he said the programme takes us nowhere unless we bench mark the income level which we intend to double.



◆ **Farmers income and means of enhancing it in Karnataka – Preliminary Results of KAPC Study -Dr. T.N. Prakash Kammaradi, Chairman and KAPC Research Team**

Dr.T.N.Prakash commenced his presentation making a reference to the valuable points made by Sri.Vijay Javidae, Farmer leader. Giving due credit to the issues raised by him he stated that the following presentation would provide data and quantification for deliberation on farmers income where there is urgent need to find answers. Referring to the study taken up by KAPC in the previous year across 20 out of 30 districts in the state covering 874 farmers it was stated that it has provided good insights. However, he hastened to add that as in any social science study the need for consultations and validations cannot be undermined before conclusions are drawn. He called upon both policy makers and project participants to provide their valuable inputs to finalise the findings and to take it forward for possible policy implications.

Sample details

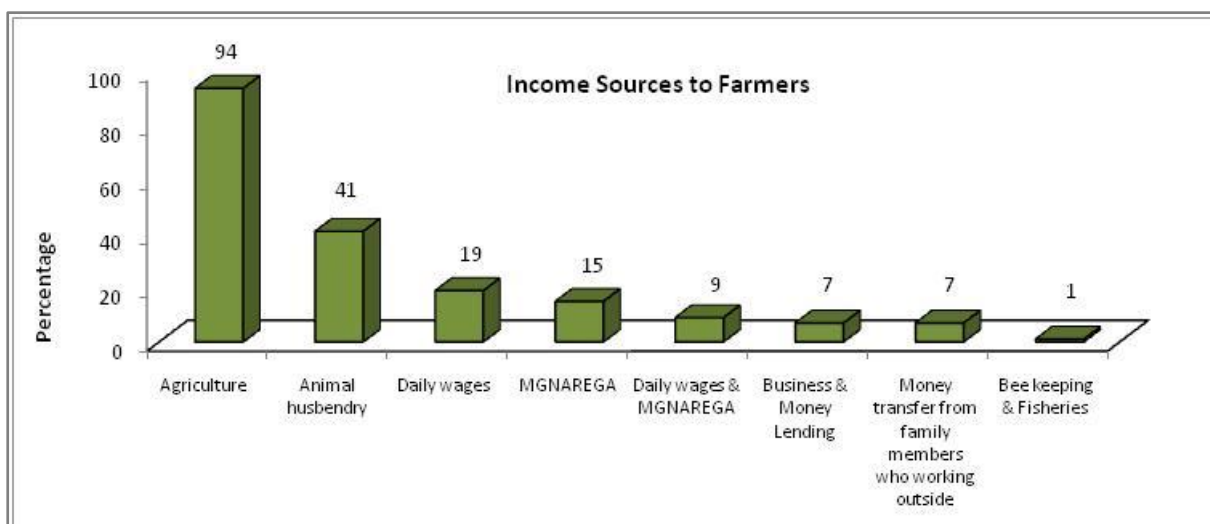
Sl. No.	Details	No.	Percent	
1	No. districts	21	21/30	
2	No. Farmers	874		
3	Social Category	SC	94	11
		ST	84	10
		OBC	387	44
		Minorities	34	4
		General	275	31
4	Size Class Category	Small	548	63
		Medium	222	25
		Large	104	12
5	Irrigation Sources	Rainfed	2358	58
		Irrigated	1669	42
		Bore well (65%), Canal (29 %), Well (6 %)		

Providing the sample details and sample distribution of the study in terms of the five divisions, soil diversity, agro climatic aspects, crops, coverage of social categories, their size and class category were mentioned. Due coverage of rainfed and irrigated farmers including different irrigation sources was informed. Moving from here the asset details of the farmers other than agriculture lands across the state was also discussed. It was informed that assets on an average is Rs.1.36 lakhs per farm of which more than 80% is on account of farm machinery and vehicles as per study findings.



Credit sources and outstandings of farmers for the year 2015-16 analysed as a part of the study shows that the per capita credit is Rs.1.36 lakh per farm house hold of which the institutional source accounts for 76% including gold loan (6%). The institutional sources include Nationalised bank (33%), Co-operative societies (19%), RRBs and others (12%) and private banks (6%). The non institutional sources accounting for 24% involves money lenders (6%), business men (8%), relations (6%) and friends (4%). The corresponding loan outstandings both from institutional and non institutional sources as it relates to debt burden of the farmers was discussed. Further, Dr. Prakash made a comparison of per capita credit, loan outstanding and the asset position of the farmers as it relates to farmers' means and net-worth indicating the vulnerability of farmers as seen in the study.

In the context of augmenting farmers' income, it is pertinent that we know more about sources of income to farmers. Accordingly, in the study the income from different sources like, agriculture, horticulture, livestock and nonfarm sources (other than agriculture) were enumerated. Wages earned under NAREGA being an important source of income was also taken into account. The small business in rural areas offers supplementary income which needs to be recognized. The money transfers which the rural families get from outside is a transfer income which needs to be reckoned. The income generating assets created under Govt. sponsored programme is yet another source of income.



The major source of farmers' income continues to be the core agriculture to the extent of 94% followed by 41% in animal husbandry. Wage income, both daily wages and from MGNAREGA is substantial with a total share of 43%. The income from business, money transfers and miscellaneous sources is 15%. Discussing on the monthly house hold income of different categories of farmers, it was informed that on the whole across the farmers categories the monthly income is Rs.14490/-.

Building up his logical argument further, Dr.Prakash went on to discuss the annual per capita income of different categories of farmers in Karnataka (2015-16). While the state per capita income is Rs.1.48 lakhs per annum, the per capita income of farmers is about 23% of it @ Rs.34443, which means the farmers income is less than 1/4th of states per capita. Benchmarking the rural BPL income of Rs.12000/- per annum, we need to look at the incomes of small and marginal farmers to decide on the acceptable levels of income which the study has brought out.



Factors explaining variation in household Income of different categories of farmers is an important dimension that can provide interesting insights for policy formulation. It is in this context Dr.Prakash explained the outcome of multiple regression analysis on income of farmer categories across regions in Karnataka. The idea here is to find out how different factors like farmers age, education level and land holding size influence the farmers income. That apart, it is interesting to know the impact of agriculture income per se and income from Government programmes as it affects the household incomes of small, medium and large farmers. Stating that the findings are quite interesting he explained that by and large the age factor does not matter in household incomes as the study has shown. When it comes to education the regression analysis shows that while in case of small farmers it matters in other categories there is no much significance. As for the size of land holdings the factor has a high impact on incomes across all farmer categories. The importance and impact of government incentives on the income of farmer households is best pronounced in small farmer category as compared to other is a notable point.

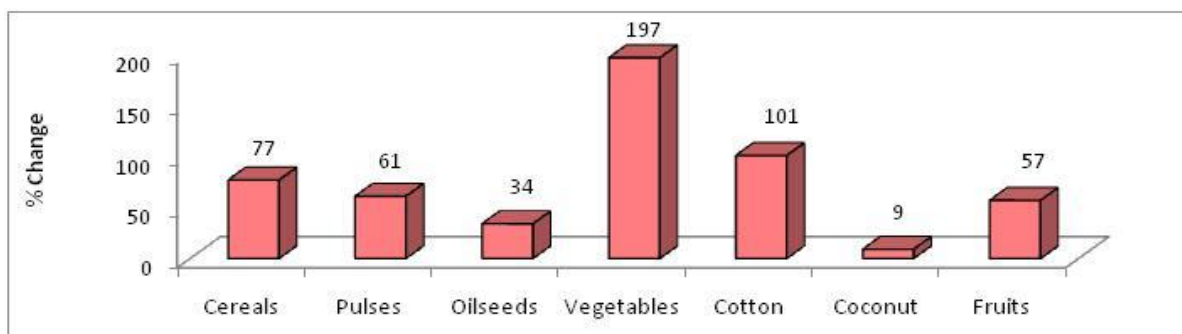
At this point Dr.Prakash introduced to the audience that how inequality in income distribution is explained using the two economic concepts of **Gini co-efficient** and **Lorenz curve**. For a general understanding he gave a simple interpretation that the Gini co-efficient measures the inequality say for example, in levels of income with the figure zero expressing perfect equality and a figure of 1 (or 100%) expressing maximal inequality. Drawing the attention to the Gini co-efficient across farmer categories for the different regions of the state he pointed out that the overall co-efficient 0.241 in the study is indicative of very minimal inequality seen among the farmers. Pointing to the straight line in the graph and naming it as the line of perfect equality he explained the Lorenz curve as the extent of deviation from this line indicative of the minimal inequality of farmers' income observed in the study supported by the Gini co-efficient said above.

Stating clearly that **stakeholders' opinion** matters most in any development initiative as in the instant case Dr. Prakash presented the considered opinion of farmers brought out by the study. The farmers in the study when asked about the laudable objective of doubling their income in the next five years, 54% of them having stated 'YES' indicated that there is ground for optimism. The next question that followed is on the components what combination of activities could be ideal for such a doubling of income. The farmers have clearly opined that promoting Agriculture with livestock and other activities is the best approach. This coupled with government programmes could definitely bring the desired results is the view shared by many of them. Regarding income, a good number of farmers say that the most important aspect is the multiple sources of income. Of course there is divergence with some of them in addition emphasizing on doubling and on fixed income as well with a small number favoring government compensation also as a helpful measure.

On the succession of agriculture and its continuation as a family occupation the farmers feel that it is subject to a more favorable situation of co operation and encouragement from one and all. In this regard the biggest concern among farmers seems to be the income insecurity followed by problems/constraints including the low social status. On the point of IFS as a possible intervention that can help the issues that need to be addressed are labour problems, input related concerns and the challenges of marketing a number of products. Farmers also perceive some complexities related to overall management in carrying on multiples activities on the farm which need to be addressed.

Deliberating on ways and means of enhancing farmers' income the yield enhancement through the much popular Krishi Bhagya scheme of GOK was brought to fore. With a "before" and "after" comparative analysis of yields it is evident that there is substantial impact on yields. In terms of % change it has been clearly shown that the scheme impact is highest in vegetables followed by cotton crop. In cereals and pulses also the change is to the extent of 60-80%, substantial yield change is seen in fruit crops as well.

Impact of Krishi Bhagya on Yield Enhancement (% increase)



Presenting the KAPC's pioneering efforts in popularizing mechanization as a cost cutting measure, it was shown how use of machines for different operations in as many as 23 crops bring down the costs. In paddy for e.g. use of transplanting machine can reduce the cost by 38% resulting in increase to the extent of 123% in per acre net profits.

◆ Cost Reduction by Mechanization

Sl.no.	Crop	Operation	% cost Reduced
1	Paddy	Transplanting	38
2	Paddy	Harvesting	35
3	Ragi	Harvesting	46
4	Jawar	Tractor drawn Sowing	30
5	Maize	Vakkane	27
6	Bajra	Tractor drawn Sowing	45
7	Bengal Gram	Tractor drawn Sowing	32
8	Tur	Harvesting	23
9	Black Gram	Tractor drawn Sowing	46
10	Green Gram	Tractor drawn Sowing	30
11	Groundnut	Harvester	20 to 25
12	Soyabean	Harvester	15
13	Sunflower	Harvester	17
14	Cotton	Harvester	25 to 30
15	Tomato	Mulching	30 to 35
16	Onion	Sowing	80
17	Potato	Harvester	20
18	Fruit Crops	Weeding by rotavator	20 to 25
19	Coconut	Weeding by rotavator	20 to 25
20	Arecanut	Peeling	23
21	Zinger	Transplanting	75
22	Turmeric	Harvesting	50
23	Pepper	Processing	40

◆ Share of income from different sources under IFS

Income transfer to farmers through **Anna Bhagya Scheme** of GOK has been quite substantial and stating that the benefits of such interventions need to be noted, Dr. Prakash mentioned about huge procurements made in Ragi and Tur. The procurement benefiting 1.28 lakh tur farmers and 0.63 lakh ragi growers is a notable point. The per farmer benefit in tur crop is to the extent of Rs. 50000 and the same is Rs. 7000 in case of ragi.

The benefit is on account of the procurement price announced by GOK with a bonus of Rs. 450/Q over and above by MSP declared by Government of India. However, the market aberration of tur prices not responding to the initiative was an aspect on which Dr. Prakash wanted the response from planners.

Income transfer through Anna Bhagya

Sl. No.	Particulars	RAGI (2015)	TUR (2016)
1	Procurement	20,37,690	31,32,373
2	No. farmers benefited	62,487	1,27,703
3	Cost of Production (Rs/Qtls)	1881	3500
4	MSP (Rs/Qtls) GOI	1650	5050
5	Procurement Price (with Bonus)	2100	5500
4	Prevailed Market Price (Rs/Qtls)	1600	4600
5	Procurement/Farmer (Qtls)	33	25
6	Benefit Over Market Price (Rs)		
	a) Per farmers (Rs)	15,725	22,500
7	Benefit Over Cost A1+FL		
	a) Per farmers (Rs)	7142	50,000

Concluding on his holistic presentation touching upon an array of issues encompassing concepts, practices and interventions all aimed at betterment in incomes and farmers' welfare, the converging point was on inevitability of IFS approach. Stating that it is no easy task, the need to take the challenges head on was emphasized. The need for providing backward and forward linkages on the one hand and developing location specific individualized IFS models was strongly brought out. He wanted farmers to realize that while income should be from multiple sources the credit input has to be from a single source. The situation as shown in the field study is contrary to this with farmers borrowing from multiple sources where as their income sources are not diversified. He called upon the youth, contingent of 25 farmers from each selected district to take the challenge in its real spirit and prove that there can be turn around in agriculture, making farming a choice profession.

◆ Remarks by Sri.Vijay Paul Sharma, Chairman CACP

Mr.Vijay Paul Sharma, informed the audience on the CACP's view point on the issue of MSP and the challenges faced. The present discussions transcending MSP in to the arena of farmers' income and farmers' welfare he said, is a notable development. Stating that there are challenges for the state, Govt of India and all the stakeholders he delved on 5 to 6 important areas that concerns farming and farmers. First and the foremost is the problem of low productivity and saturation of yields in some of the crops. In solving this, he desired that efforts are to be made on breakthrough technologies that can take us beyond the yield barriers. He emphasized the importance of yield gap analysis and initiating the concerted action for higher yields. The urgency to cut on cost of cultivation, improve quality of inputs and betterment in subsidy use efficiency were all important.



Calling upon the farmers to diversify agriculture production he wanted them to harness the opportunity available in high value agriculture. He stated that the surplus man power in rural areas needs to be absorbed by nonfarm activities. The focus of the nonfarm activities on post harvest aspects is to take care of the much



needed infrastructure, value addition and agro processing. The need for varieties suitable for processing, seasonality and cluster approach were emphasized. In his view, the developmental approach should be supported by the four pillars of **technology, institutions, infrastructure and incentives**.

Stating that the Govt.of India has given high priority for farm mechanization he was appreciative of the initiatives of GOK in this direction. He also complemented the GOKs progressive procurement policies. He called upon the state governments to join hands with GOI in strengthening the extension system that is vital for farm development.

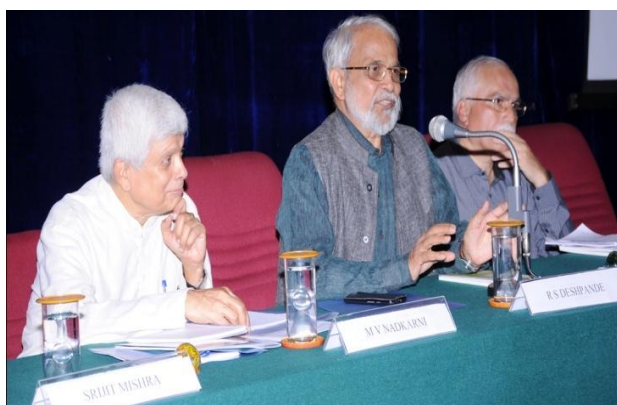
◆ **Remarks by Dr.Ganagi, Chief General Manager, NABARD, Bangalore**

The CGM of NABARD appreciated the KAPC's approach and focus on IFS. He stated that NABARD's national workshop, South India Workshop and workshops at district levels have all given a fillip to IFS programme. The promotion of FPOs is another initiative in which NABARD is taking much interest. There are already 180 FPOs formed in Karnataka which can help farmers in cost reduction as well as marketing. The goals set for the year 2022 for doubling the farm incomes is a major task before Govt. and Banks alike. He emphasized that realizing this goal means enhancing irrigation i.e. more crop per drop, improvements in rainfed agriculture and betterment in balance application of fertilizers and micro nutrients. As credit is one of factors of production there is scope for doubling of farm credit and more importance has to be given for medium and long term loans to the farmers.

Making a mention of Rs.10 lakh crores to be disbursed he stated that at least three lakh crores in this has to be for medium and long term loans. There are still problems like tenancy where amendments are required. Issuing of tenancy certificates is important. Supporting the JLGs is a priority which can fit in the KAPC's IFS programme in selected districts. He called upon the project officials to prepare a credit plan for the villages covered so that NABARD can facilitate bank linkage in all such cases.

24-6-2017, Parallel Technical Session - 2.30 pm to 4:00 pm	
Topic 1 : Finance, Institutions and Incentives	
Venue : Auditorium	
Chair Person:	Prof.R.S.Deshpande, Former Director, ISEC
Speakers:	Prof.M.V.Nadkarni, Former VC, Gulbarga University
	Shri.D.S.Raghu, Farmer Member, CACP
	Smt.Kavita Kuruganti, Alliance for Sustainable and Holistic Agriculture (ASHA)
	Dr.Srijit Mishra, Director, NCDS, Bhubaneswar

Prof.Nadkarni, began his talk and read his paper in Kannada on the topic **Institutional Challenges before Indian Agriculture**. The English version of his paper had already been circulated and he stated that a more detailed paper on the topic is being published in the forth coming issue of economic and political weekly. Before commencing the presentation he drew the attention of the audience to the presentation made by Dr. Dalwai during the earlier session and stated that the critical issue of structural crisis mentioned by him is in fact the core of his following presentation as well. The excerpts from his talk on the subject are as follows:



Agriculture anywhere has two aspects - land and man, or farm and farmer. Both are equally important, though policy makers and agricultural experts often take the farmer – land or the farm as more important. Increasing the productivity of land and water is important, but it is only instrumental in improving the welfare of the farmer and his family and of course the welfare of the whole population. The Government of India has now officially recognised the equal importance of the agricultural producer as against production, by renaming the Ministry of Food & Agriculture as the Ministry of Agriculture and Farmers' Welfare.

Though the Green Revolution in Indian agriculture made the country self sufficient and also contributed to increasing farmers' incomes on the whole, it also made agriculture capital and technology intensive. This made the farmers much more market – dependent even for inputs, as never before. The average size of operational holdings has continuously declined in India from 2.28 ha in 1970-71, 1.84 hectares in 1980-81 to 1.33 ha in 2000-01 and further down to only 1.11 ha in 2010-11. If we roughly take viable holding as 2 ha, then the average holding in agriculture ceased to be viable by mid – 1970s. Actually even 2 ha, i.e., 5 ac, may not be enough for this purpose particularly if there is no irrigation for the holding. But we assume 2 hectares only as a rough measure of minimum viability. It is necessary to emphasize that the viability line for holdings or farm families would be different from and much higher than the poverty line.

If the line of viability is drawn at 4 hectares or 10 acres, then in 2010-11, 95 per cent of holdings were not viable and area under them was 68.4 percent. It would appear thus that the large bulk of holdings are not viable. If the viability line is at 4 hectares, then only 5 percent of holdings or farm families are viable in cultivation and the area operated by them is only 31.6 per cent, which is less than 1/3rd of the total cultivated area in India. In a progressive economic sector, viability of economic units should be no problem, but in Indian agriculture its non – viable part is rapidly increasing and is becoming uneconomical.



Though the goal of doubling farm incomes looks laudable, it is too general. The goal should not be one of merely doubling agricultural part of our GDP, but of increasing the incomes of particularly non – viable farmers to make them viable. The more sensible goal from the point of improving the incomes and welfare of farmers is to make all agricultural holdings commercially viable.

◆ **Presentation by Shri.D.S.Raghu, Farmer Member, CACP**

Mr.Raghu began his presentation by narrating the factors that are taken into account for price fixation by Commission for Agricultural Costs and Prices (CACP). The factors involved are cost of cultivation, demand and supply position, international prices, domestic prices and consumer prices. He went on to explain how there are multi faceted problems in the process of price fixation.

There have been lot of changes over the years and the last three to four years there has been much betterment in the price fixation and incentives especially for pulses. Citing that the core of the problem is in procurement and making a categorical statement that procurement is not being done properly, he desired that the agencies like FCI, NAFED and state organisations have to play a more pro active role. Without such synchronization mere MSP declaration cannot bring the desired results.

Referring to Dr.T.N.Prakash's point on mechanisation as a cost reduction measure Mr.Raghu was all in praise for Karnataka's model on farm mechanisation. He recounted that the work done in 175 centers setup by Karnataka Govt.to facilitate mechanisation, a number of centres have been visited by them and it has been found that the results are very much there on the ground for all to see. It has been proved beyond doubt that the initiative has helped farmers across crops and regions and that cost reduction is possible by appropriate mechanisation. The noteworthy point in this success story is that results being true even among the large number of small and marginal farmers. He was emphatic that this intervention is worth emulating and infact the GOI wants its replicability in other states.

While much of the discussions in the context of support price relates to field crops, Mr.Raghu said that often the horticulture crops are found to be relegated. The acute problems in many vegetables particularly tomato is well known. Taking the example of onion shortage and related issues he stated that we cannot belittle the importance as everybody knows that once it lead to toppling of the Govt. at the centre. A price stabilization fund of Rs.500 crore is miniscule compared to the large requirement that is needed for horticulture crops and this needs to be duly provided for. Emphasizing on distinctive features of commercial crops where it involves higher investments there is need to provide better incentive system for such crops. On the subject of subsidy to sugarcane farmers he wanted the audience to appreciate the magnitude of the problem. Every year Rs.14000-15000 crores becomes payment due for sugarcane farmers and it leads to delays in payments. The Central Govt. incentives of interest free loans have been helpful to alleviate the situation to some extent.

◆ **Smt.Kavita Kuruganti, Alliance for Sustainable and Holistic Agriculture (ASHA)**

Converging on five important things which Govt. has to do she stated that procurement operations are to be expanded. Hand-in-hand with this offering better prices and incentives is important. There has to be a continuous quest for betterment of market interventions and we need to remember that much has not happened at all in this direction when it comes to horticulture crops. It is therefore pertinent that price compensation for horticulture crops has to receive due attention.

Recapitulating that many of the speakers have touched upon the point that MSP alone cannot solve the problems she stated that there has to be punitive clauses for containing any unfair, manipulative and below MSP trading practices that are not uncommon in markets. There is need to strengthen farmers hand which is being attempted through the much popular FPO approach. However, in the way the NABARD is promoting the

scheme there are many aspects that need a fresh look and the barriers are to be eased out if the concept has to take off in a big way. She stated that in the NABARD scheme there are many hassles in availing working capital loans and at the same time when it comes commercial banks there are security related complexities for FPOs to avail funds.

◆ Farmers' interaction

On completion of all the three presentation under the topic finance, Institutions and Incentives there were interactions from the farmers side where in a number of issues were deliberated. Notably among the farmers who interacted were Sri.Byrareddy, Sri.Puttaswamy, Sri.Nanjegowda (Chamarajanagar), Sri.Krishnappa, Sri.Manjunath (Tumkur), Sri.Shivappa (Kolar), Sri.Patel (Davanagere) and Smt.Sunandamma. Further there were also farmers from Hubballi, Ranibennur and Raichur who participated in the discussions by putting forth their view points. In nutshell the points discussed can be summarised here:



- Though gold loan to farmers is a good measure which helps the farmers, banks reporting progress in farm loans by encashing this channel disproportionately to the disadvantage of core agriculture lending and relegating the need for term loans and crop loans is a matter of serious concern that should receive attention at policy level.

- On the banking issues there were suggestion on the need for NABARD to intensify its field operations, curtail NBFCs from reckless operations and charging exorbitant interest rates and perpetrating exploitative practices. Though permitted, Banks reluctance to lend loans upto Rs.1 lakh without security to JLGs needs to be addressed. Why not fix targets to banks on lending to FPOs so as to encourage farmers to organise themselves for collectivisation.



- Need for enhancing the farmers paying capacity and efforts to augment it so as to enable farm families to have a minimum standard of living while covering all the essential expenditures on education, health and so on should be the focus of welfare rather than on increasing or doubling income was also one of the views.

- It should be noted that by the very nature of some of the subsidiary activities like sericulture, dairy farming, poultry farming which farmers take-up there is inherent employment generation which is often not given due consideration in recognition of the contribution from the farming sector. In fact there is need for some studies and research on this area which could be useful.

- On the market front the continuing problems the farmers face in APMC and the havoc played by middleman was raised and the farmers wanted to know what interventions are being made to better the situation.



- What are the steps proposed to overcome the limitations in the much praised Phasal Bima Yojana and the need for improvements aimed at larger coverage was also discussed. What is required is full compensation to farmers in case of crop failure and not compensation related to crop loan component.

- Highlighting the marketing problems faced by coconut growers, the Tumkur farmers wanted to know why there has to be discrimination in market reach for different agricultural commodities and cited the example of wheat from Punjab reaching the nook and corner of the country. If this be so why copra from our state should not find access to far off markets where there is demand was the question.
- On the MSP issue there were several queries; Raichur farmers wanted know why there is no MSP for chillies, Chitradurga farmers wanted good support price for oil seeds and some went to the extent of saying that what they need is not just support price but a scientific price. Farmers desire that the declaration on MSP should be well in advance so as to enable and help farmers in their decision making. Closely related to the issue is what benchmark year CACP adopts in calculation of cost of cultivation and inflation etc. was also brought to fore.

◆ **Clarifications from Dr.T.N.Prakash, Chairman, KAPC**

Taking example of some crops he mentioned that how at the Central Govt. level MSP is computed for the country as a whole becomes a reference point for the states. In a specific case where a given amount is fixed as the MSP for a unit production say in Rupees per quintal, its reasonableness or otherwise across the states where that crop is produced could vary and can be so with individual farmers. There are many factors that come in to play which could be extent of irrigation facility, adequacy of power supply and yield levels of the crop. Where the farmers are able to achieve higher yield levels for the crop the very same MSP may seem to be sufficient while in case of lower productivity the cost per quintal is higher often making MSP appear insufficient. He related his argument in a specific crop like paddy comparing the situation across the states of Karnataka, AP, Punjab and Haryana to prove the point.



Touching upon the issue raised by coconut farmers it was clarified that if not coconut and copra as primary products at least coconut oil as processed item could definitely be promoted to provide market access all over the country through PDS where there is good off take. The Govt. of Karnataka being persuaded to make a move on this issue was a notable point.

On the issue of MSP for horticulture crops the alternative approaches that could be taken by Govt. to help the horticulturists was brought home by citing the successful intervention in arecanut where the deficit payment assurance could correct the market with immediate result. In this case benchmarking the areca price at Rs.27000 per quintal for a given product quality, the GOK announced that any short fall in market price would be made good by market intervention through deficit payment showed immediate market correction with prices bouncing back to original level much to the relief of areca growers.

24-6-2017, Topic 2 : Role of Technology and Cropping System	
Venue: Seminar Hall - I	
Chair Person:	Dr.Ayyappan, Former Director General, ICAR, New Delhi
Speakers:	Dr.Mruthyunjaya, Former Deputy Director General, NAIP, ICAR, New Delhi
	Dr.Prabhakar Shetty, Rtd.Director of Research, UAS , Bangalore
	Dr. Mukund Joshi

Dr.Mruthyunjaya began his presentation by highlighting important features of agriculture development involving integrating or diversifying crops/enterprises, increase in production, management of practices to reduce production costs and role of value chain for better marketing of agriculture produce. He spoke about the World Bank aided NAIP project implemented nationwide through ICAR. He said that under NAIP apart from technology dissemination, how institutions, infrastructures and trade all converged to increase the income and improve welfare of the farmers.



Stating that the main focus of the project was on value chain, the experience of more than 50 projects of Rs.5-6 crores each taken up all over the country was narrated. In Karnataka itself there were two projects in which the results have shown that convergence benefits the farmers enormously. In backward districts of Chitradurga and Bidar where the rural sustainable livelihood programme was implemented, number of institutions were involved and the technology was leveraged to provide sustainable livelihoods.

The hallmark of the project was in setting up the benchmark and milestones for measurement and quantification of benefits. Conducting baseline survey as is being done in the KAPC, IFS project helped NAIP in quantifying benefits of completion of five years project period. The transformations and changes that happened at the end of the project period were again enumerated in an evaluation which showed clearly that on many parameters including farmers' income, achieving desirable farmers welfare could be attributed to the project.

◆ Presentation by Dr.Prabhakar Shetty

An overview of the state in terms of geographical area, districts, taluks, ZPs, agricultural zones and farmer categories in the state was presented. 36% of the area being irrigated with a substantial area under dry land farming, its problems and prospects were covered. The proposed IFS models in the select districts would be developed as it relates to the agricultural zones and the realities of agro climatic situations is an aspect that has been kept in mind. The large scope of rejuvenation of tanks and covering more area under micro irrigation were highlighted.



Reviewing the productivity of crops (2013-14) in the state as compared to the country as a whole it was stated that in paddy it gets first or second position and in Jowar, Maize and Tur it is in fifth position, where as in Soybean and Sugarcane the state stands in third position. However, it was brought home that when it comes to yield gaps the situation in many crops in the state is disquieting. As for example in paddy yield gap is as high as 108%. Higher yield gaps are also seen in cotton and groundnut and the situation is concerning even in other crops like Maize, Soybean, Sugarcane and Ragi. In developing the IFS models in the project the prioritisation of crops has to take into account these field realities.

There are some determining factors that cannot escape our attention in planning the proposed project. Nearly 70% of the area in the state is rainfed and has severe limitation in terms of moisture deficit. The problem is compounded further because of low fertility and deficiency of micro nutrients. Moreover, in many crops yields are either declining or stagnant and this is a matter of serious concern. There is also a problem of over exploitation of ground water and state experiences the exceptional eleven year drought situation. The problem of small holding size hindering the viability is also to be kept in mind.

Convergence of all the guiding principles of integrated farming system would be there in developing the IFS model. That would include proper use of natural resources, recycling of wastes, reducing dependency on external inputs, increasing the water use efficiency, soil and water conservation and augmenting fodder for livestock.

KVK-wise Interface with farmers

The farmers from **Dakshina Kannada** were called in to present their views. Stating that the concept of IFS has taken roots in DK the farmers wanted more technology intervention in promoting mixed farming in rice and areca farming system prevalent in the district. The yield gap in some of the crop and acute disease problems in arecanut were discussed. Stating that the average holding size in the district is about 3-5 acres they wanted specific IFS models to be worked out based on minimum scales of viability of the components in individual farms.



The coconut and arecanut farmers of **Tumkur** had their serious concern on pest and disease problems which remained unsolved. The coconut mite problem being alarming in the district was brought up by many farmers. The low yield in case of many coconut gardens and the need to increase the nut yield was discussed. The house was also informed that not even 50% of the coconut area is under drip irrigation and it needs to be addressed on priority. Responding to farmers the experts gave many suggestions that included collectivising their efforts to find solutions to their problems and there was also an idea on trying out direct marketing of coconut in nearby towns and Bangalore. Similarly, farmers were advised to take up at least some minimal processing of millets and get the advantage of Bangalore market which is nearby. The farmers wanted the online marketing to be strengthened so that it gives the intended benefits.

The focus of **Chitradurga** farmers was on Onion and scope/potential for millets. The farmers expressed that if KVK can provide milling facilities it could help those who are interested to take up value addition for better income.

The issue raised by **Haveri** farmers related to their woes in the area of seed production. Stating that the farmers are gullible, many seed companies have exploitative practices which need to be addressed through awareness and trainings. They also opined that why government shouldn't take up seed production in Haveri where private companies are so much in operation. The KVK informed that their experience in the district has shown even on marginal holdings, the impact of IFS is evident.

Raichur farmers mentioned of the price fluctuation problems in chillies being very acute. Establishment of godowns for storage was suggested. Many farmers were interested in diversification to take up livestock enterprises especially poultry and sheep rearing.



Farmer representative of **Kalaburgi** desired that a processing unit for Tur dal would facilitate value addition and the KVK should give impetus for creation of necessary infrastructure.

In **Belagavi** it was stated that the farmers are switching over from Sugarcane to Tur and vegetable cultivation. As much as 35% of this kind of shift is seen in the district. Farmers wanted to learn more about scope and prospects for diversification and requested for intervention in bringing high value crops for bettering their incomes.

Dispelling the popular all is well attitude with **Kolar** labelling it as land of silk and milk, the farmers were distraught with ground water problems in the district. With the borewell failures being serious, farmers incurring heavy losses was a point of deliberation. They wanted tank desilting to be given due priority and were at a loss to understand who would take this responsibility as the departments are evading this issue. The encroachment of tanks is also a serious issue which needs to be resolved.

Remarks by Dr.Srijit Mishra, Director, NCDS Bhubaneswar

Dr.Srijit Mishra sharing his experiences in Orissa touched upon two important points: one on convergence and the other on basic universal income for farmers. He stated that Govt. has to give clear instructions to district administration without which the problem of convergence raised during the discussions would remain unsolved. He narrated how working at cluster and blocks through proper convergence with secretary at the state level evincing interest has given results in Orissa.



24-6-2017, Topic 3: Marketing and Value Chain	
Venue: Seminar Hall - II 2:30 pm to 4:00 pm	
Chair Person:	Dr.Gopal Nayak, Professor, IIM, Bangalore
Speaker:	Dr.Vasanth Kumar Rtd.Special Secretary to Government of Karnataka, Department of Agriculture

Chair person **Dr. Gopal Nayak** began his presentation from a review of current situation in agriculture and informed that there is noticeable technology lead in agriculture, though its reach on a large scale is still wanting. Input markets have proliferated with innumerable brands often contributing to confusion in farmers. When agriculture is becoming input intensive this kind of confusion is accentuating risks in agriculture especially in the context of quality and supply of inputs. Further with high transaction costs, high wastage and too many intermediaries, the produce markets are not farmers friendly. There are still many difficulties and barriers in availing risk management mechanisms like crop insurance and futures market. Integration with global markets and rapidly changing market scenarios add to further complexities.

Delving on agri food value chain issues the importance of proper guidance to farmers was brought to fore. Lack of information on good agriculture practices, poor quality supporting services and confusing input markets are the issues that need priority in any developmental intervention on farming. It is in this context the findings of IIMs pilot project in Nalagonda and Solaguppa were highlighted in the presentation. It was stated that the interventions here involved reaching the information to farmers on time, technology platforms used for the reach out and an agriculture graduate placed in each GP to provide info to farmers. Facilitation for storage facility, initiatives in processing and value addition and formation of farmers groups with Raitha Mitras are the other features that have proven successful. The outcome has been impressive with as much as 30% reduction in cost with a similar extent of increase in yields. Having seen this success, GOK in fact wants replication of this approach in more places.



As export competitiveness is an important aspect in reaching out to global markets and there is need for certifications which include GAP certification and pesticide residue test. Even in organic farming the certifications become prerequisite for good market outreach. There is need to educate farmers on all these aspects and the processes are to be hassle free and cost effective. Storage of produce in warehouses and produce loans are to be augmented to obviate distress sale which is often a major problem affecting farmers. With the presentation concluding here the session was open for farmers' interaction and discussions.

Smt.Sunanda Jayaram representing the farmers' movement and a representative at the state level put forth her argument that in all the initiatives including the one presented, the emphasis is mostly on helping the farmers in production front and when it comes to problems related to market the farmers are left in lurch. Quoting the example of procurement of milk which happens at village level with great ease for the delight of farmers, there is untold struggle when it comes to transacting other produce excepting some



vegetables that could be easily sold locally. She was vehement in her views that the marketing system should be such that the farmers should be able to transact all their produce without there being need to go beyond the gram panchayat in most of the cases. Why not establish suitably scaled small cold storage and such other facilities to take away the distress and help farmers to focus more on production without undue botheration, was her question.

◆ Challenges & latest developments in value chain

Mentioning about expanding world population and how there are Increasing concerns about resource scarcity Dr.Vasanth Kumar brought in the critical issues of land availability, biodiversity conservation, global warming, pollution control, food safety & hygiene and labour availability & reduction in cost.



Deliberating on the cost competitiveness and export constraints Dr.Vasanth Kumar listed how poor infrastructure such as road and rail connectivity, lack of railway sides, Jetties in sea ports, perishable cargoes at airport adversely affect the competitiveness. Added to this there are issues that relate to too many intermediates in the supply chain, lack of cold chain facilities, poor research and development facilities and wastage in supply chain. Beyond competitiveness there is need for compliance on various aspects that relate to quality conforming to International standards, need for continuous product innovation, brand and market building and global standards, ability to deal in volumes and consistency in supply and lack of processing and value addition products.

Culminating his discussions on sustainability as the core of any development strategy he stated that while we enhance production we also should look at how to reduce use of natural resources, recycle and use of renewable resources. There is urgent need to minimize / eliminate soil and environment pollution. Reducing the wastage & enhancing storage / shelf life is to be given utmost priority. Touching upon the role of bees in food production the need to preserve and promote pollinators and give a fillip to apiculture was also emphasized.

Dr.Gracy, Professor of Agri.Marketing, UASB, shared the research work on market forecasting for select crops and the efforts made to disseminate the same to growers. Though the benefits of forecasting has become useful in some of the crops there is need for a larger outreach and the farmers have to be educated on making use of such information. Going further, it was stated that the success would depend on crop planning without which forecast would not help.

Dr.Kantharaj from KVK, Belagavi informed that the area under turmeric has seen enormous expansion in the recent years and there is need for promoting processing facilities. Dr.Vasanth Kumar informed that there is growing importance of turmeric in many therapeutic uses including cancer. There are very high level processing opportunities and atleast some farm level processing should be encouraged for value addition through the cluster approach.

Smt.Sunanda Jayaram raised a fundamental question that despite all the technologies available and scope / opportunities deliberated in great detail, what matters most is whether agriculture is an attractive proposition for farmers or not. She wanted the 200 farmers who are participating in this workshop to come out with an answer for this question and also state equivocally what is the major problem confronted by them. The

farmers in unison stated that the problems of production are not so daunting but what matters is the marketing problem. They wanted more practical solutions and workable alternatives to be suggested based on field realities. With this the deliberations on the topic were concluded.

■ Summary and recommendations of parallel technical sessions

Dr. Ayyappan, Former Director General, ICAR, New Delhi summarized the discussion points and brought out the recommendations related to the technical session on “**Role of Technology and Cropping System**”.

- The most important point that emerged strongly in the discussion was on **convergence** of technologies and development initiatives, be it irrigation, farm pond and so on. Convergence of all line departments at grass root level is imperative for development. There was a suggestion that if need be the Govt. should think of a Special Purpose Vehicle (SPV) as a strategy at Taluk level for the desired results.
- The point on farm/crop **diversification** is well understood and farmers have taken to the concept with willingness but the intensification of the facilitation role is the need of the hour. Seed production is one such area for diversification which has promising potential. Farmers wanted more opportunities created by the SAUs for participatory seed production under seed village concept.
- Adoption of **Integrated Farming System (IFS)** and deriving benefits from it needs careful planning and meticulous implementation. The success depends on micro planning and farm level strategies which should be participatory in nature. It should derive its strength from the main crop based farming system in the area be it Sugarcane or Tur which were specifically discussed and complementarities should be built around it. In the planning process district specific, taluk specific and location specific proven systems and successful cases should serve as benchmarks in the developmental process.
- Acute pest and **disease problems in plantation crops** like coconut and arecanut have been a great concern for many farmers and they feel that they have been left in the lurch. This is a matter which should receive immediate attention of the SAUs and KVKs in extending a helping hand to farmers and restore their confidence in finding technology based solutions for these problems.
- In the context of value addition, efforts are to be on taking a realistic outlook. The **concept of minimal processing** should be popularized with the emphasis on minimization of crop losses and farm level processing with minimal investments.
- Need to strengthen the **online marketing** and expand the usage for larger outreach should receive priority. The case in point that came up in the discussion was the distress sale of Chillies in major growing areas requiring ameliorative measures. The farmers need proper guidance on usage of available Apps and decision making tools through capacity building and skill development programmes.
- The concept of **universal basic income** which came up during the discussion was well received by farmers. However, quantifying the acceptable levels of income for the purpose was a contentious issue requiring much detailed deliberations.

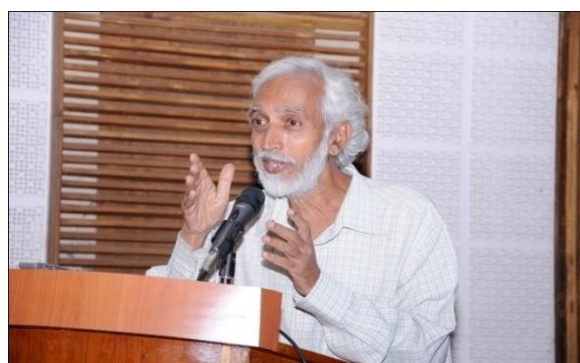


Dr. Gopal Nayak, Professor, IIM, Bangalore, summarized the points that emerged in the technical session on **Marketing and Value Chain**.

- The farmers major concern as expressed during the discussions is on **price levels, fluctuation of prices and lack of market information**. It was strongly felt that all corrective mechanisms have to be initiated to minimize the farmers risks due to vagaries of markets and the outcome should be to enable farmers to get right prices without much delays. The MSPs not working in the true sense and continuation of market exploitation is a serious botheration to farmers.
- **Nearness to markets** is also another important aspect that figured in the deliberations. Taking the example of milk, farmers wanted the disposal of produce at the earliest in the nearest of the places. The suggestion is on a market platform at GP level which could benefit farmers and can help them obviate many of the risks and uncertainties.
- **Market reforms** are to be pursued more purposively bringing in farmer friendly systems and practices. Direct payment systems are to be given due importance and there has to be a betterment in e-trading platforms to ensure much larger participation.
- **Infrastructure inadequacies** continue to haunt the agriculture sector with the much required warehousing and storage facilities being not within the reach of farmers. Farmers also face the hassles related to liquidation of produce and availment of pledge loan from banks. Corrective measures are to be worked out in collaboration with financial institutions and distress sale should be avoided at any cost.
- **Value addition** should get its due place not merely in its advocacy but in actual developmental initiatives as it has a prime role in price stability. It requires convergence of many factors and collaboration of multitude of institutions requiring concerted efforts. The most promising development in this context being promotion of FPOs, every effort should be made to ensure that the idea picks up on a large scale.
- The **learnings** from IIM's two year long multi locational study has shown that proper extension support and hand holdings can help farmers to effectively reduce the costs and increase yield and income. The need for emulating such interventions was emphasized.



Dr.S.V.Hittalmani, former Additional Director of Horticulture, GOK, gave his view point on the workshop deliberations. He strongly felt that even after 60-70 years post independence period our reach out to farmers has fallen short of expectations. He recounted that in his experience of having widely travelled throughout the state and innumerable interactions he had in the field it is evident, that even among the so called progressive farmers the technology reach in terms of actual adoption is limited. Going by this, it is clear that resolving production constraints itself can mean multiple fold yield increase which could benefit farmers. In the context of government aspiration, be it at state or Central Govt. level there is enormous scope for leveraging production approach itself to attain doubling or tripling of farmers' incomes.



Smt.Gayathridevi from Institute for Cultural Research and Action appealed to KAPC that in addition to the initiatives on IFS taken in eight villages across selected districts in the state at least in one village, efforts should be made to popularize organic/alternative systems of farming by involving an NGO.

Dr.Srijit Mishra, Director, NCDS, Bhubaneswar,

shared his experiences in Odisha state, by discussing the point on agrarian crisis vs Agriculture crisis. Narrating on the problems faced by farmers and those dependent on agriculture as a part of agrarian crisis, while the problems of production, productivity declining farm size as agriculture crisis, he established inter connectivity and overlaps that needs to be understood. The multiple dimensions of agriculture policy as it encompasses diverse problems like food security, farmers vulnerability, farmers suicide were delineated. On the problem of declining productivity, he brought to fore the missing linkages between research and extension. In a scenario where farmers’ risks are increasing, amidst all the interventions, there is all the more importance for deliberating on universal minimum income for farmers. Towards this are the questions related to cost reduction and increased incomes, he stated.



■ **Concluding remarks by Dr.Ashok Dalawai**

Moving on to the initiatives taken by the Govt.of India Dr.Dalawai highlighted how the soil health card scheme, a right strategy that has given quick results. Having been successful in reaching 10 crore farmers out of 14 crores in issuing the health card containing 12 vital parameters to be updated once in two years is no less a task, he stated. As per a study instituted by GOI, it has been found that sequel to issuing a health card there has been reduction in cost of cultivation (5-6%). The noteworthy aspect is reduction in application of Urea to the extent of 10% with simultaneous increase of 5% in application of P and K resulting in much desired balanced application of fertilizers. The outcome has been evident in increased yields as well (8-10%). To substantiate how cost effective this intervention has been he stated that the expenditure on soil health scheme is a mere Rs.300 crore compared to a huge fertilizer subsidy on which the government expends Rs.70000 crores annually. The government’s efforts in popularizing Neem coated urea as a measure for increasing fertilizer use efficiency was also brought to fore.



On the sensitive issue of MSP Dr.Dalawai gave some explanations on the cost concepts that are used in fixing the prices and delved on its complexities as the framework has to fit the country as a whole. The dual dimension of taking care of both producers and consumers in an economy is a tight rope walk that confronts the planners which needs to be appreciated. The very farmers whom we want to extend more help as producers may land us in a conflict when their interest as consumers also is to be protected, he stated.



Market access is another important issue on which there is much expectation. As per Swaminathan Committee report there has to be one market for every 80 sq.km., where as in reality there is one for every 480 sq.km., indicating that we have a long way to go in addressing the issue. Going further on this point Dr.Dalawai made a mention of the new model APMC act which has already been adopted in Punjab. This comprehensive act with its progressive outlook covers all agricultural produce including livestock to be brought under one umbrella which needs to be adopted by all the states and can bring in total integration creating a single market for the best advantage of the farmers. The loud thinking being there on removal of inter-state barriers was also discussed.

■ Response and wrap-up by Dr.T.N.Prakash

The response from Dr.Prakash brought out certain basic differences on the issues related to MSP and the stand taken by Govt.of India vis a vis the farmers interest in the state. Dr.Prakash was vehement that lack of sensitivity at any level puts the burden of facing the farmers and the issues that confront them squarely on the state officials. Stating that MSP is one such issue where a divergence in the approach between GOI and state has been the cause of discord and discontent. He put-forth his views with facts and figures to prove his point as to how the happenings and the steps taken by the centre defy logic in the matters related to protecting farmers interest.



In this regard he quoted the rate of MSP increase which earlier was 15% to be followed later by smaller increases of only 3 to 4%, which did not in any way commensurate increase in cost of inputs nor inflationary forces. It is here one has to see the relevance of a cost plus 50% approach advocated by Swaminathan Committee which Dr.Prakash exalted as the most appropriate one to protect farmers interest.

On the delays in declaration of MSP which affects the farmers decision he wanted a more concrete action and desired that if it is done atleast three months in advance it would be more meaningful. Much needs to be done beyond declaration of MSP to ensure a meaningful implementation and substantial procurements to extend a helping hand to farmers in the real sense, he stated. On the issue of providing plus 50% to farmers Dr.Prakash opined that one need not be guided only from the agricultural economist's point of view in the context of farmers welfare as there are many ramifications of it in to serious problems like loan waivers, farmers suicide and so on.

Towards the end there were some interactions and many of the farmers put-forth their view points for the consideration of both the state and GOI and wanted a favourable approach to solving their problems. They wanted an environment of hope and confidence in which farmers can contribute their might providing food security while their interests are well taken care of.



**NATIONAL WORKSHOP
ENHANCING FARMERS' INCOME AND WELFARE IN KARNATAKA**

DAY – II 25-6-2017

KVK PRESENTATIONS

◆ ICAR-Krishi Vigyan Kendra, Belagavi

- University Of Horticultural Sciences, Bagalkot
- Karnataka Agriculture Price Commission, Govt. Of Karnataka
- Horticulture Extension Education Unit, Arabhavi

Dr.Kantharaju. V., Principal Investigator, presented the progress report of project implemented through HEEU, KRCCH Arabhavi. In his opening remarks, he informed about the Co-PIs, Project Assistant and collaborators in the project. A number of agencies have joined hands as collaborators in the project. They are Karnataka State Department of Agriculture, Z P, Belagavi, ICAR-Krishi Vigyan Kendra – Tukkanatti, Belagavi, ICAR-Krishi Vigyan Kendra–Mattikoppa, Other developmental departments, Belagavi (Dist.) and Gram Parivarthan Kendra, an NGO. He further informed that selection of Project Assistant has been completed and that selection of Field Assistants is in progress.

The details of the selected farmers along with the baseline survey information was presented. The items covered are age, category, and education level of farmers apart from the land holdings in acres, source of irrigation and crops grown. It can be seen that the coverage of farmers in terms of rainfed and irrigated holdings is 50:50 and due representation have been given to various crops grown in the area. Most of the farmers have basic education with an SSLC being common with many of them. It was informed the grama samithi has been formed and there are 10 members in the group.

As for the activities taken up so far, an interaction meeting was organized by Joint Director of Agriculture, Belagavi on 19-12-2016. The meeting was Chaired by Dr. T.N. Prakash Kammaradi, Chairman, Karnataka Agriculture Price Commission, Govt. of Karnataka. The District Commissioner, (in charge officer), Heads of different line departments, Heads of HEEU, Arabhavi, KVK, Tukkanatti and KVK Mattikoppa also participated in the meeting. A Press meet was organized and its coverage was given in Vijayakarnataka (Belagavi version) and other local dailies.

The activities so far undertaken include the famers' interaction meetings, soil health campaign, celebration of World Environment Day and baseline survey of the farmers with ISEC staff. The action plan prepared for implementation of the project was presented.



- Dr.Kantharaju. V. – Principal Investigator
- Dr. C. B. Koujalagi - Co-PI
- Dr. I. B. Biradar - Co-PI
- Dr. Preetham S. P. - Co-PI
- Dr. Chougala- Co-PI
- Dr. Shridevi - Co-PI

◆ ICAR-Krishi Vigyan Kendra, Chitradurga

The progress report of the KVK, Chitradurga was presented by Dr.S.Onkarappa, Senior Scientist and Head of KVK. Mentioning about Shidlayyanakote, it was stated that the project village is in the state border area and is a backward village under Rangenahalli Gramapanchayath with a geographical area of 1028.38 ha. It is 23 km from Hiriya town and 63 km to district head quarters. The village map was shown and its features explained. Giving more information on village it was informed that the population is 766 with 203 households. There are 356 people of SC and ST category, 415 OBC and others 54. The area being in low rainfall zone its implications on the problems in farming and developmental concerns were expressed.

ರೈತರ ಆದಾಯ ಮತ್ತು ಕಲ್ಯಾಣವಿವೃದ್ಧಿ ಕಾರ್ಯಕ್ರಮ

ರಾಷ್ಟ್ರೀಯ ಕಾರ್ಯಾಗಾರ

ಐ.ಸಿ.ಎ.ಆರ್- ಕೃಷಿ ವಿಜ್ಞಾನ ಕೇಂದ್ರ, ಚಿತ್ರದುರ್ಗ
ಬಬ್ಬೂರು ಫಾರಂ, ಹಿರಿಯೂರು

ಕೃಷಿ ಮತ್ತು ತೋಟಗಾರಿಕೆ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಶಿವಮೊಗ್ಗ

The list of selected farmers with their profile was presented and it was shown how the diversity in terms of



land holding size, age and educational categories have been kept in mind in selection process. Also in this selection due coverage of dry land farmers is a notable feature. While informing that there are many educated farmers in the group it was mentioned that the experience in the village has shown interest and involvement in agriculture is more important than education alone. There being less number of youth among the selected farmers was stated to be possibly reflective of lesser number of them now-a-days being interested in farming.

Activities conducted:

- **Base line survey** : Base line survey is being conducted by Plus trust Bangalore, for preparation of IFS model for individual selected farmer.
- **Training** :Training on ICM in Redgram was conducted at ICAR- KVK ,Chitradurga , Babbur farm , Hiriya
- **Seeds distribution**: Onion, red gram and fodder seeds were distributed to selected farmers of Shidlayyanakote
- The Success stories on onion seed production and ICM in Groundnut were presented.

In collaboration with line departments various s are proposed involving DOA, DOH, V & AH, forestry and health departments. An NGO, NBSSLUP, Bangalore and NABARD Chitradurga have also been drawn in many of the initiatives.

Responding to the presentation Dr.T.N.Prakash, emphasized that in all progress reporting the IFS focus of the KAPC project should be central and more discussions are to be on the related modalities. From the farmers side the concluding point was on the need for greater thrust on soil and water conservation and providing farm ponds. Dr.M.G.Chandrakanth made a point that why not Chitradurga farmers evince much more interest in millet cultivation considering its health benefits. He emphasized that value addition in millets has to be given due importance realizing its export potential as well. Reacting to this the KVK officials informed that the suggestions are well taken and it was stated that they are already working on this idea and some processing machinery are being procured to give a fillip to the program.

◆ Krishi Vigyan Kendra, Dakshina Kannada

Dr. Shivakumar Magada, made a presentation covering the various aspects of the project progress in Daregudde, the selected village. While reporting the progress, it was informed that the project team was Dr Manjappa Asst. Prof. (Fisheries), Mr Harish Shenoy, Scientist (Agronomy), Miss Swati, Economist, Dhananjaya, Senior Research Fellow, Shankara, and Shanmukha, Field Assistants. It was made known that apart from the specific staff member as above all the scientists in KVK have been part of this developmental initiative.



The details of the selected farmers along with the baseline survey information was presented. The item covered includes age, category, and education level of farmers apart from the land holdings in acres and source of irrigation. Among the selected 25 farmers 4 are in the general category, 18 being OBC with three in SC.

The progress of the project

- Field office is set up and functioning at Daregudde
- Farmers were taken to Chitradurga to attend the Chief Minister on 13.05.2017
- Farmers were taken to Bangalore to attend the workshop conducted at ISEC Bangalore
- To converge all the schemes of developmental departments viz agriculture, horticulture, veterinary, fisheries all the schemes were explained to the farmers and submitted 23 application for **Krishi Honda** and 3 applications under **Pashubhagya Yojane**
- Supplied Swarnadhara chicks to 15 farmers who are interested in poultry farming
- Till now nearly 75 families survey is completed
- Farmers of Daregudde were linked to new marketing network started at Moodabidre
- Completed the survey of IFS model which was sent by Plus Trust, Bangalore
- Health camp is scheduled
- Distributed agriculture account book to all selected 25 farmers

Work-Plan

Deliverables	Months (July 2017-March 2018)									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Linking of schemes and initiatives of the department, Grama Sabhe, survey, field visits, Training at ISEC										
Survey in accordance with Plus Trust and ISEC, training on bee keeping										
Health Camp, Soil survey, Farmers training at Manipal, Farmers tour, Linking of schemes and initiatives of the department, Implementation of IFS models, Grama Sabhe										
Marketing linkages, training farmers on pre processing of produce, Formation Producers organization										
Survey, field visits, Training at ISEC										
Validation of project, stakeholders meeting, report submission										

◆ ICAR-Krishi Vigyan Kendra, Haveri

The presentation of the progress report of KVK Haveri by Dr.Sarojini J.Karakannanavar and the session was presided by Sri.Siddalingappa representing the selected farmers group. The names of PI, Co-PIs, research assistant and field assistant were mentioned.

▪ Dr.Sarojini J.Karakannanavar	:	Principal Investigator
▪ Dr.S.M.Mundinamani	:	Co-PI
▪ Dr.Ashok P.	:	Co-PI
▪ Sri.Vijayakumar Ilakal	:	Research Assistant
▪ Kum.Manjula Kalabhavi	:	Field assistant
▪ Kum.Priyanka Dodavada	:	Field assistant

Reporting steps taken so far under the ten listed activities along with the participation from farmers and others were indicated. In the held during Nov.2016 under the chairmanship of Dr.T.N.Prakash, 45 officials from various departments had participated. Village Khurda Veerapura was selected as the project village in the meeting held during Dec.2016 in which eleven farmers and three officials were present. In the subsequent meeting held on 9th Feb.2017 the beneficiary farmers and farm women were selected. Later in the month of April, village meeting was held in which about eleven farmers participated. In the meeting held 13th April 2017 in which fourteen farmers were present there were discussions on nutritional aspects, cleanliness issues that need to be promoted. There were also discussions on seed selection for monsoon crops, importance of IFS and improved horticulture crops. On 17th April 2017, farmers health camp was conducted with participation of 123 farmers and 15 officials. In second week of May the questionnaires for base line survey was reviewed in association with ISEC team. Later in the month farmers' training along with Grama sabha was conducted in which 31 farmers were present.

Presenting the list of selected farmers the details on age, education, size of land holding, source of irrigation in individual cases were mentioned along with crops grown by each farmer. The farmers group consists of 20 male members and 5 female members of whom 13 belong to SC and STs. The majority of the farmers are in the very small holding category followed by small land holders with two of them in the medium size land holdings.

Under the soil health campaign good awareness has been created among the farmers on the importance of soil test and soil health. Adopting the discussion approach the farmers have been involved in soil sample collection educating them on its usefulness and insisting on the practice of applying fertilizers based soil nutrient status. The test results are awaited and on receipt of the same the soil health cards will be issued to the individual farmers. The soil health card carries the information on farmer's particulars, soil sample particulars, test results including recommendation on secondary and micro nutrients.



Concluding on the presentation, Dr.Sarojini informed the action plan in nutshell encompassing establishment of office, initiatives on IFS, conducting nine grama sabhas, two workshops at KVK, five skill based training s and two educational tours (one state tour and one South India tour) for the farmers. Distribution of agricultural booklets meant for farmers and providing the branded uniforms was highlighted.

◆ ICAR-Krishi Vigyan Kendra, Kalaburgi

The progress report of project being implemented through KVK Kalaburagi was presented and in his opening remarks, he informed about the Co-PIs, Project Assistants and the collaborators involved in the project. Names of the all team members were informed and the collaboration with DHAN foundation as an NGO actively was noted.



The details of the selected farmers along with the baseline survey information was presented. The item covered includes age, category, and education level of farmers apart from the land holdings in acres and source of irrigation. The major crops in the area are Tur, Jowar, Wheat, Bajra and Sunflower. The crops grown by individual farmers have also been documented for project planning.

The activities undertaken include the famers' interaction meetings, soil health campaign, Kharif crop training and baseline survey of the farmers with ISEC staff. It was informed that farmers' health campaign for blood test is yet to be taken up and similarly the animal health camp will be taken up shortly. A ten member Village Committee has been formed giving due representation as per project norms.

Every month from June 2017 Gram Sabha meetings are being held in the village to plan and review the project implementation. The details of the selected farmers along with the baseline survey information was presented. The items covered include age, category, and education level of farmers apart from the land holdings in acres and source of irrigation. Health check up of farmers/farm women will be done besides taking blood samples for analysis of pesticides contamination if any.

In the months ahead as per the project guidelines, five skill development training programmes will be organized. Two workshops of two days each will be organized to review implementation of the project, plan of work and providing technical information during the months of Aug/Dec, 2017.



Southern states exposure visit to 25 selected beneficiaries will be organised during the months of Nov/Dec 2017. Implementation of IFS modules will be taken up as per the project guidelines and with the involvement of Plus Trust NGO (Nominated by KAPC, GOK) on an ongoing basis.

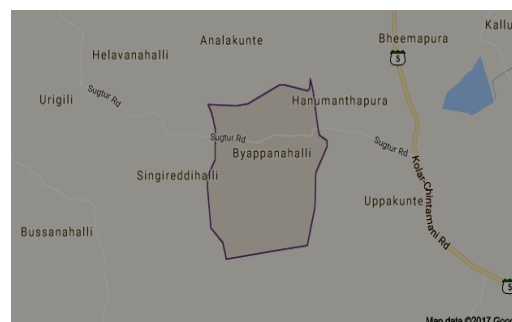
In his concluding remarks Dr.Prakash expressed his happiness about the progress made and thanked Dr.Narayana Gowda for his valuable help and suggestions. The involvement of DHAN foundation as an NGO was a good move and that they are to be involved in meetings and discussions came as suggestions.

◆ ICAR-Krishi Vigyan Kendra, Kolar

The presentation of the progress report of KVK Kolar was by Dr.Nagaraj and the session was presided by Sri Mani Reddy representing the selected farmers group. It was informed that after visit to several villages in the month of April along with Dr.Jagannath, KAPC, it was finally decided to select Byyappanahalli, Sugatur Hobli in Kolar district as the project village.



There are five taluks in Kolar district which is in Eastern dry zone with 1798 villages and the number of holdings is 2.67 lakhs. The main source of irrigation is from borewells and tanks. The major soil types are red, red loamy, red sandy loam and sandy.



The satellite map of the Byyappanahalli village was shown and the noticeable features were explained. The district profile shown had covered the geographical area, land use and the cropping systems.

Kolar is known as land of silk and milk. Sericulture is predominant with 20 farmers involved in this activity and there are 13 horticulture farmers. The village has 10 tractors and 350 crossbred cows. There are 13 borewells used for irrigation. There is a primary school, an Anganawadi centre and five Stree Shakthi Sangas. The amenities in the village include primary school, Anganwadi, bus stand, ration shop, KSRTC bus service is available. There is also drinking water filter unit in the village. The nearest bank (Pragati Gramin Bank) is located in Sugatur which is hobali head quarters and Primary Health Centre is also located in Sugaturu.



There have been so far 9 meetings conducted from April to June 2017. The focus of the meetings conducted is on varied topics like project modalities, implementation, responsibilities of farmers, exposure visits, KAPC me launching, interaction meeting with DC, meeting with DOA officials, soil sampling method and benefits of soil analysis and method demonstration on seed treatment in redgram and training on pit method of transplanting in ragi. The benefit of the redgram demonstration encompassed about 30 farmers for whom redgram seeds were also distributed during the program. It was stated that pit method (2'x2') of planting in ragi which is being practiced in other taluks of Kolar district is catching up and hence the farmers group were given a demonstration and the same has been received well. Out of 20 sericulture farmers in the village, 10 are part of the selected group who participated in the training on integrated farming system in mulberry and were provided with improved sericulture equipments.

■ ICAR-Krishi Vigyan Kendra, Raichur

Dr. M.V.Ravi, made a power point presentation covering the various aspects of the project progress in Jakkaladinni, the selected village. While reporting the progress, it was informed that one technical assistant and two field assistants have been appointed as per the requirements of the project. It was made known that apart from the specific staff member as above all the scientists in KVK have been part of this developmental initiative.

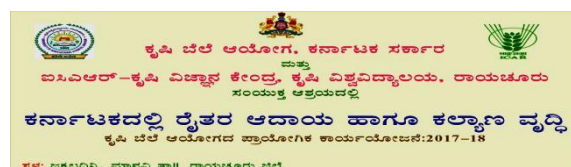
The details of the selected farmers along with the baseline survey information was presented. The item covered includes age, category, and education level of farmers apart from the land holdings in acres and source of irrigation.

In the first meeting held on 16-1-2017 discussed about the details of the project objectives. CEO suggested to implement on-going activities of different line departments and to prepare action plan. Sri.Hanumanagouda Belagurki, Member of APC suggested about Importance to be given to Micro-irrigation by the Horticulture department as this is a tail-end village.



The action plan prepared include the various facets like Integrated Farming System (IFS), DSR, ICM in cotton and Pigeonpea. The cropping pattern in the area is predominately lead by cotton and chilli along with different cereals and pulses.

The project progress includes opening of the office at Jakkaladinni village, baseline survey, selection of the 25 farmers and establishment of grama samiti completed. Further, conducted meeting at Jakkaladinni about the PRA.



Collection of soil samples from 25 farmers, creating awareness about soil health information and method demonstration on soil sampling collection are completed. Farmers health checkup for 10 members has been planned with the association of Kasturba Medical College.



Concluding on the presentation as above Dr.Ravi recapitulated that all efforts are being made to put the project on a strong foundation. Establishing an office on the road side with good access for all and display of project hoardings for larger outreach was made known. It was stated that active participation of the line departments and their assurances on providing due support for the various components by way of convergence under various ongoing schemes is noteworthy. Being a tail end village and the rainfall being scanty in the last four years, it was brought home that the farmers have been eagerly looking for the betterment through the IFS as an intervention and wanted the implementation without delays. Rightly the IFS component in the project context have been tailor made to individual farmers through the participatory process and what matters now is its early implementation. Dr.Ravi wanted the Plus Trust organization who have been given the responsibility of the IFS project to step in early and develop individual IFS models and take it forward in tune with the project requirement.

■ ICAR-Krishi Vigyan Kendra, Tumkur

The presentation was made by Dr. T S Sukanya, Senior Scientist and Head, KVK, Tumkur. The session was chaired by farmer leader from Hullukatte Koppa village, Tiptur taluk. To start with the was explained and about the meeting held during Nov, 2016 under the chairmanship of KAPC for preparation of the proposals from KVKs. The news paper clipping on coverage of this initiative in 'Vijaya Karnataka', was shown to the audience. It was informed that Tumkur district has been facing the problem of low rainfall over the years and more so in the previous year. The distribution of rainfall being erratic is the main issue.

The district profile was presented covering the taluk and agriculture zones. The 3 dry zones, EDZ, CDZ and SDZ converging here was a point showing the rain dependency and the low rainfall in the area. The problems in coconut cultivation relates to recurrence of pests and diseases.

The project progress includes the completion of the base line survey and the initiative related to soil health campaign. The demonstration on soil sampling has been done and the results of the soil tests for all the participating farmers is on record. It has been found that while the soil pH is by and large in the normal range, organic carbon is medium. Among the major nutrients nitrogen content is low, phosphorus is medium to high, the potash content is again being on the lower side.

Summarising the activities completed so far a look ahead of things to be pursued was presented. These include providing the soil health cards for the farmers. Health check up campaign for farmers in the age group of above 40 yrs will be taken up in collaboration with Kasturaba Medical College. The Animal Health Department has assured that they will fully support the livestock health campaign to be taken up shortly. The CPCRI support is available for addressing the pest and disease problem in coconut which is much needed and a workshop is proposed to be conducted. In fact the project has a moto of pest and disease free coconut gardens in the village. Convergence of the other line departments is being brought in. Trainings with the help of ISEC has been planned. Interstate field study s are on the anvil. Some training s on allied activities have been proposed along with technology demonstration in IFS. There is scope for pond fisheries and steps are being initiated. Realising the scope for millet production in the village, branding and direct selling by farmers is being explored using the FPO platforms. Formation of interest groups based on farm sector and nonfarm sector activities as suggested in DC meetings would be given due importance.

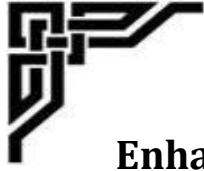


Responding to the presentation the farmers from the village re-emphasized on support to coconut crop in terms of better MSP for Copra which can greatly help in improving the farmers' incomes. Similarly, they wanted more support for farm ponds to better the situation. With this the presentation was concluded.

Program conclusion

The programme ended with the concluding remarks of Dr.T.N.Prakash who called upon all the farmers and stakeholders whole heartedly to participate in the project and make it a success. Sri.Hanumanagowda called upon the participants to keenly look for possible convergence to achieve the best outcome in the IFS initiative of KAPC. The vote of thanks was given by Dr.Parameshwara of KAPC.

PHOTO DOCUMENTATION



National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Programme Registration





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Programme Inauguration





National Workshop - 24-25 June 2017
Enhancing Farmers' Income and Welfare in Karnataka

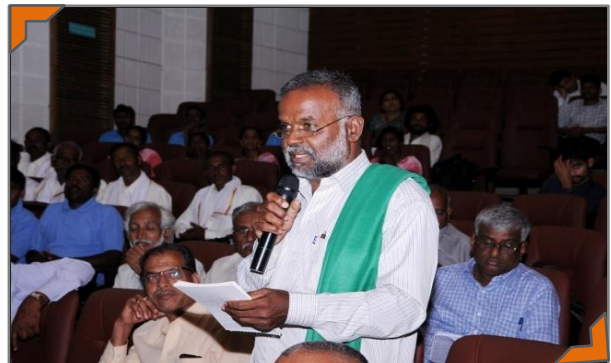
Farmers interaction





National Workshop - 24-25 June 2017
Enhancing Farmers' Income and Welfare in Karnataka

Farmers interaction





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans
KRCCH - Horti.Extension Education Unit, Arabhavi, Belagavi dist.



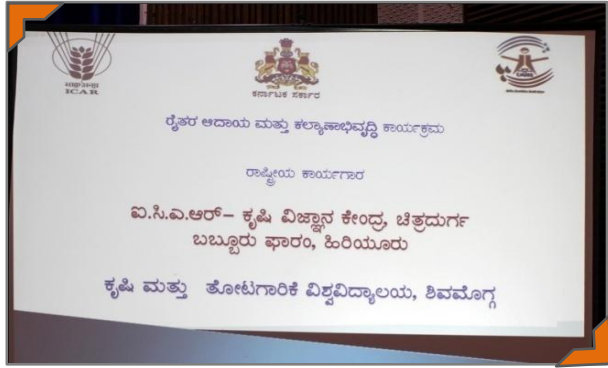


National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans

KVK - Babbur farm, Hiriyur, Chitradurga dist.





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans KVK - Kankanadi, Mangalore, DK dist.





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans
KVK - Hanumanahatti, Haveri dist.

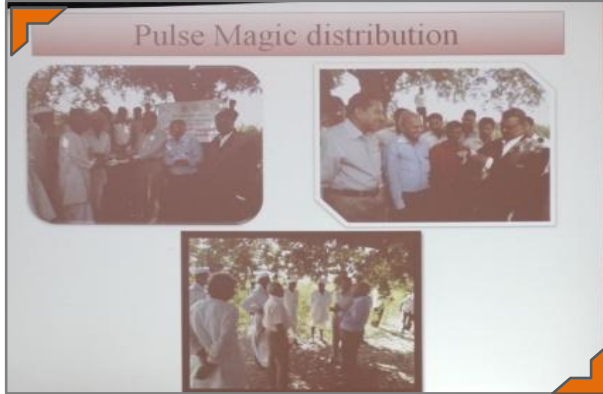




National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans KVK -Kalaburagi





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans KVK - Kolar





National Workshop - 24-25 June 2017

Enhancing Farmers' Income and Welfare in Karnataka

Presentation and discussion on KVK action plans KVK -Raichur

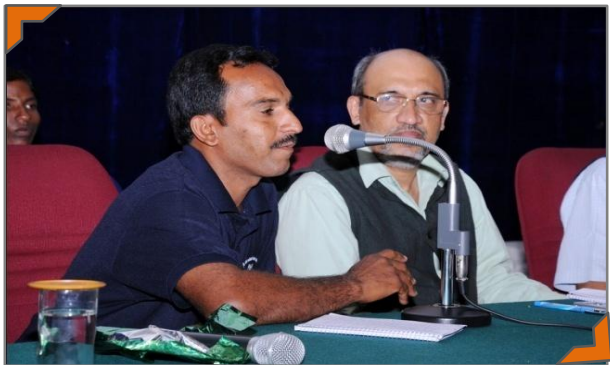
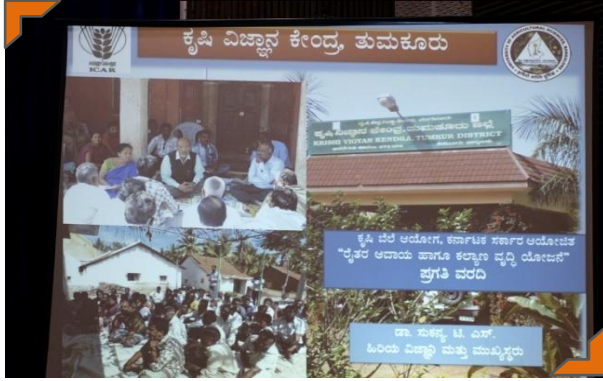




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Presentation and discussion on KVK action plans KVK - Tumkur





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Project participants - Group photos

KVK, Chitradurga



Left to right

Standing	1. Sunil	2. Bindhu	3. B.Hanumaiha	4.Vadnappa
	5.Chidanand	6.Vasu	7.Chandrappa	8. Prakash
	9.Devaraj	10. Krishnappa	11.S.N.Krishanppa	12.Shivamurthy
	13.Nagaraj	14. Nagabhushan	15.Hanumanthappa	16.Mallikarjunappa
	17.Ramajja			
Sitting	18.S.N.Nagaraj	19. Krishnappa K.	20.Guruswamy	21.Parameswhar

KVK -Dakshina Kannada





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KVK - Tumkur



Left to right

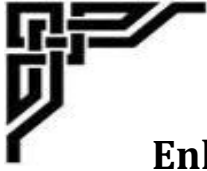
Standing	1.Thimmegowda	2.Arun	3.Prakash	4.Ranjith
	5.Lohith	6.Kumar	7.Vinay	8.Madhu
	9.Prashanth	10.Manjunath	11.Shanthkumar	12.Nikil
	13.Madhukar	14.Chandrakanth	15.Lokesh	16 Manjunath
Sitting	17.Mahalingappa	18.Nagaraju	19.Rangaswamy	20.Chethan 21.Kariyappa
	22.Nagappa Desai	23.Mamatha	24.Shashikala	

KVK, Kolar



Left to right -

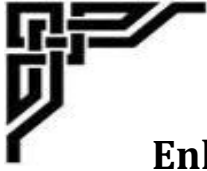
■ Sitting :	1. Munireddy	2. Gopal Gowda	3. Ravi B.M	4. Ravi Kumar
■ First row:	5. Venkatesh	6. Ravi	7.Prasanna Krishna	8. Ram Reddy
	9. Srinivas	10. Srinivas Gowda	11.Manjunath	12. Mune Gowda
	13. Muni Reddy	14. Narayanaswamy	15.Vishwanath	16. Byrareddy
	17. Venkategowda	18.Channappa	19.Nagesh	20.Narasimha
■ Second row:	21.Satish	22.Venkatreddy	23.Manjunath	
	24. Arunkumar	25.Prakash		



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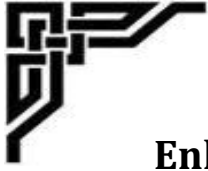




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Project Team - Group photos





Workshop documentation:

H.S.Subramanya
Agrinsights Consultancy Services Pvt.Ltd,
71, 5th main, 2nd 'A' Cross, Anandnagar, Bangalore - 560024
Ph: 32210403, Mobile: 9449028395 / 7259703394, e-mail-agrinsights@gmail.com